

11. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected from the group consisting of:

KGVSPSYRCPCRFFESH	(SEQ ID No. 18)
KGVSLPYRCPCRFFESH	(SEQ ID No. 19)
KGVSLSPRCPCRFFESH	(SEQ ID No. 20)
KGVSLSYPCPCRFFESH	(SEQ ID No. 21)
KGVSP*SYRCPCRFFESH	(SEQ ID No. 22)
KGVSLP*YRCPCRFFESH	(SEQ ID No. 23)
<i>Q'2</i>	
KGVSLSP*RCPCRFFESH	(SEQ ID No. 24)
KGVSLSYP*CPCRFFESH	(SEQ ID No. 25)
KGVS <b>Btd</b> YRCPCRFFESH	(SEQ ID No. 26)
KGVSL <b>Btd</b> RCPCRFFESH	(SEQ ID No. 27)
KGVSLSBtdCPCRFFESH	(SEQ ID No. 28)
KGVSPSYRC	(SEQ ID No. 29)
KGVSLPYRC	(SEQ ID No. 30)
KGVSLSPRC	(SEQ ID No. 31)
KGVSLSYPC	(SEQ ID No. 32)
KGVSP*SYRC	(SEQ ID No. 33)
KGVSLP*YRC	(SEQ ID No. 34)
KGVSLSP*RC	(SEQ ID No. 35)
KGVSLSYP*C	(SEQ ID No. 36)

KGVSB**t**dYRC

(SEQ ID No. 37)

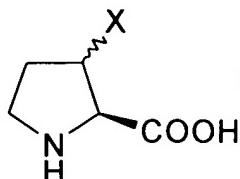
KGVSLB**t**dRC

(SEQ ID No. 38)

KGVSLSB**t**dC

(SEQ ID No. 39)

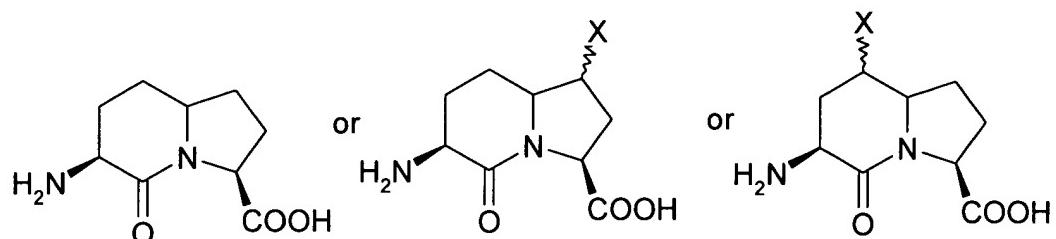
wherein P\* =



with X= Ar, Ar-OH, alkyl and more

Q<sup>12</sup>

and Btd =



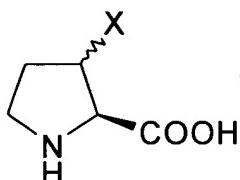
X= Alkyl, Ar, Ar-OH and more

Please amend claim 12 as follows:

12. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected from the group consisting of (SEQ ID Nos. 40-50):

KGVSPSYRC	KGVSLPYRC	KGVSLSPRC	KGVSLSYPC
KGVSPSYRC	KGVSLPYRC	KGVSLSPRC	KGVSLSYPC
KGVSP*SYRC	KGVSLP*YRC	KGVSLSP*RC	KGVSLSYP*C
KGVSP*SYRC	KGVSLP*YRC	KGVSLSP*RC	KGVSLSYP*C
KGVSBtdYRC	KGVSLBtdRC	KGVSLSBtdC	
KGVSBtdYRC	KGVSLBtdRC	KGVSLSBtdC	

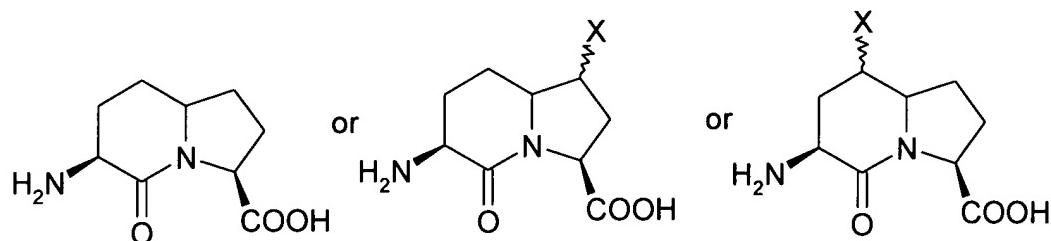
wherein P\* =



with X= Ar, Ar-OH, alkyl and more

Q / 2

and Btd =



X= Alkyl, Ar, Ar-OH and more

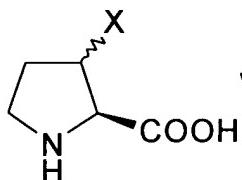
Please amend claim 13 as follows:

13. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected from the group consisting of (SEQ ID Nos. 51-72):

KGVSPSYR	KGVSLPYR	KGVSLSPR	KGVLSYP
 X	 X	 X	 X
KGVSPSYR	KGVSLPYR	KGVSLSPR	KGVLSYP
KGVSP*SYR	KGVSLP*YR	KGVSLSP*R	KGVLSYP*
 X	 X	 X	 X
KGVSP*YR	KGVSLP*YR	KGVSLSP*R	KGVLSYP*
KGVSBtdYR	KGVSLBtdR	KGVSLSBtd	
 X	 X	 X	
KGVSBtdYR	KGVSLBtdR	KGVSLSBtd	

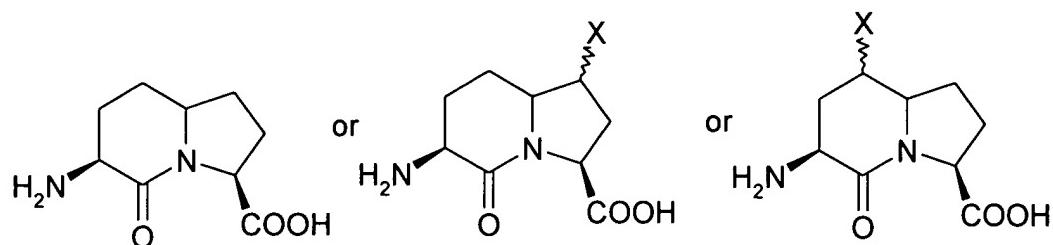
wherein X is a natural or unnatural amino acid linker between each of the arginines at position 8 in each sequence; and,

wherein P\* =



with X= Ar, Ar-OH, alkyl and more

and Btd =



X= Alkyl, Ar, Ar-OH and more

[Please amend claim 14 as follows:]

14. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected

from the group consisting of:

KGVSLSYRCPGCRFF-G<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 74)

KGVSLSYRCPGCRFFFESH-G<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 75)

wherein n is an integer from 0 to 10.

Please amend claim 15 as follows:

15. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected from the group consisting of:

KGVSLSYRCPGCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 76)

KGVSLSYRCPGCRFFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 77)

Q 12  
where n is an integer from 1 to 20.

Please amend claim 16 as follows:

16. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected from the group consisting of:

KGVSPSYRCPGCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 78);

KGVSLPYRCPGCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 79);

KGVSLSPRCPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 80);

KGVSLSYPCPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 81);

KGVSPSYRCPGCRFFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 82);

KGVSLPYRCPGCRFFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 83);

KGVSLSPRCPCRFFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 84);

KGVSLSYPCPCRFFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 85);

KGVSPSYRCPGCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 86);

KGVSLPYRCPGCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 87);

KGVSLSPRCPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 88);

KGVSLSYPCPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 89);

KGVSPSYRCPGCRFFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 90);

KGVSLPYRCPGCRFFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 91);

KGVSLSPRCPCRFFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 92);

KGVSLSYPCPCRFFESH- (CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No.93),

wherein n is an integer from 1 to 20.

Please amend claim 17 as follows:

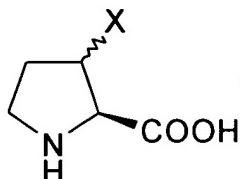
17. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected from the group consisting of:

KGVSP\*SYRCPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 94);  
KGVSLP\*YRCPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 95);  
KGVSLSLSP\*RCPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 96);  
KGVSLSYSP\*CPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 97);  
KGVSP\*SYRCPCRFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 98);  
KGVSLP\*YRCPCRFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 99);  
KGVSLSLSP\*RCPCRFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 100);  
KGVSLSYSP\*CPCRFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 101);  
KGVSP\*SYRCPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 102);  
KGVSLP\*YRCPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 103);  
KGVSLSLSP\*RCPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 104);  
KGVSLSYSP\*CPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 105);  
KGVSP\*SYRCPCRFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 106);  
KGVSLP\*YRCPCRFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 107);  
KGVSLSLSP\*RCPCRFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 108);  
KGVSLSYSP\*CPCRFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 109);  
KGVSBS**td**YRCPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 110);  
KGVSL**Btd**RCPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 111);  
KGVSLSB**td**CPCRFF-GGGG-LKWIQEYLEKALN (SEQ ID No. 112);  
KGVSBS**td**YRCPCRFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 113);  
KGVSLB**td**RCPCRFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 114);  
KGVSLSB**td**CPCRFFESH-GGGG-LKWIQEYLEKALN (SEQ ID No. 115);  
KGVSBS**td**YRCPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 116);

KGVSLB**td**RCPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 117);  
KGVSLSB**td**CPCRFF-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 118);  
KGVS**Btd**YRCPCRFFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 119);  
KGVSLB**td**RCPCRFFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 120);  
KGVSLSB**td**CPCRFFFESH-(CH<sub>2</sub>)<sub>n</sub>-LKWIQEYLEKALN (SEQ ID No. 121),

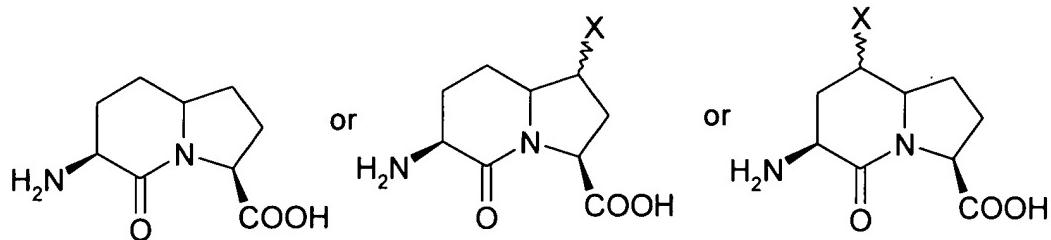
wherein n is an integer from 0 to 20 and

wherein P\* =



with X= Ar, Ar-OH, alkyl and more

and Btd =

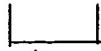


X= Alkyl, Ar, Ar-OH and more

Please amend claim 18 as follows:

18. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected from the group consisting of (SEQ ID Nos. 122-125):

KGVSLSYRCPCCRFFGGGLKWIQEYLEKALN



KGVSLSYRCPCCRFFESHGGGLKWIQEYLEKALN



KGVSLSYRCPCCRFFGGGLKWIQEYLEKALN



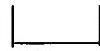
KGVSLSYRCPCCRFFESHGGGLKWIQEYLEKALN



Please claim 19 has been amended as follows:

19. (Amended) A CXCR4 antagonist peptide selected from the group consisting of (SEQ ID Nos. 122-125):

KGVSLSYRCPCCRFFGGGLKWIQEYLEKALN



KGVSLSYRCPCCRFFESHGGGLKWIQEYLEKALN



KGVSLSYRCPCCRFFGGGLKWIQEYLEKALN



KGVSLSYRCPCCRFFESHGGGLKWIQEYLEKALN



Please amend claim 20 as follows:

20. (Amended) The method of claim 8, wherein the CXCR4 antagonist peptide is selected from the group consisting of:

KGVSLSYRCPCCRFFGGGSKPGVIFLTKRSRQV (SEQ ID No. 126);

KGVSLSYRCPCCRFF(CH<sub>2</sub>)<sub>n</sub> SKPGVIFLTKRSRQV (SEQ ID No. 127);

KGVSLSYRCPCCRFFGGGEEWVQKYVDDLESA (SEQ ID No. 128);